

CLAM SHELL CONTAINER WITH COVER AND INNER TRAY

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BACKGROUND OF THE INVENTION

Items such as DVD's, CD's and VHS cassettes are conventionally packaged in clam shell containers. The clam shell containers are formed by a back cover and a front cover, each hinged to a spine. The remaining three sides of the package are formed by flanges extending from the front and back cover. The inside surface of both the front and back cover form trays for receiving the item. Often, the whole clam shell container is made from a single piece of molded plastic.

A more aesthetically pleasing package is formed by a cover made of material such as cardboard, paperboard or chipboard and having plastic trays adhered to the inner surface of the cover. Both the cover and tray are formed with a back and a front hingedly connected to a spine. Problems have arisen with this type of package having two layers adhered together and folded into the clam shell configuration.

When a clam shell container formed from two layers of material is assembled, the hinges of the tray are aligned with the hinges of the cover. Difficulty arises in the fact that, when folded, the hinges of the tray having a smaller radius of curvature than the hinges of the cover. The result is that the alignment between the cover and tray is different in the opened and closed positions. Stress placed on the hinges of the tray when the tray is adhered to, and confined by, the cover in the closed geometry and subsequently opened.

The prior art has addressed this problem in the past. U.S. Patent 3,355,081 (Kachurchak) discloses a plastic liner on a cardboard box having a notch removed from the liner along fold lines. Also, U.S. Patent 3,654,053 (Toedter) discloses a laminate having material removed from the inner layer along fold lines to facilitate the folding operation. When a tray is thermoformed, however, there is no continuous face-to-face adhesion between the tray and the cover. Also, with these prior